

TABLE S1 Discrimination of 5'-TGTA-3' and 5'-TGTTA-3' *			
Pair†	5'-TGTA-3'	5'-TGTTA-3'	K_{rel}^{\ddagger}
Py/Py	5'-T G T A A-3' 3'-A C A T T-5' $K_d = 0.014 \mu\text{M}$	5'-T G T T A-3' 3'-A C A A T-5' $K_d = 0.007 \mu\text{M}$	2.0
Py/Hp	5'-T G T A A-3' 3'-A C A H T-5' $K_d = 0.20 \mu\text{M}$	5'-T G T T A-3' 3'-A C A H A-5' $K_d = 0.56 \mu\text{M}$	0.36
Hp/Py	5'-T G T A A-3' 3'-A C A T H-5' $K_d = 4.0 \mu\text{M}$	5'-T G T T A-3' 3'-A C A A H-5' $K_d = 0.28 \mu\text{M}$	14

*The reported equilibrium dissociation constants are the mean values obtained from two DNase I footprint titration experiments on a 3' ³²P labeled 370-bp pDEH1 *EcoRI*/*PvuII* DNA restriction fragment¹³. The assays were carried out at 22 °C, pH 7.0 in the presence of 10 mM Tris•HCl, 10 mM KCl, 10 mM MgCl₂, and 5 mM CaCl₂.

†Ring pairing opposite T•A and A•T in the third position.

‡Calculated as $K_d(5'-TGTA-3')/K_d(5'-TGTTA-3')$.